in the examples of these papers. The catheters were placed on patients 8.3 days on average in the model hospital in the southern part of Taiwan. Therefore, the risk of CLABSI is higher with femoral venous catheters compared to no-femoral venous catheters. Anyway, we could reduce the probability of CLABSI by removing catheter as soon as possible. We promote very strongly evidence on the study's result and Taiwan CDC could take as a reference to the promotion of CVC bundle project.

PS 1-129

IMPLEMENTATION OF CVC BUNDLE CARE IN THE INTENSIVE CARE UNIT IN A REGIONAL TEACHING HOSPITAL

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Purpose: Intravascular catheters play a central role in the care of critically and chronically ill patients, but it's also a main route of bloodstream infection in the hospital. July 2011, the central venous catheter (CVC) care bundles were executed in the intensive care unit (ICU) in a regional teaching hospital. Density of infection of catheter related bloodstream infection (CRBSI) were 1.298‰ in ICU on 2011.
Methods: According to CVC bundle care guidelines from Centers for Disease Control (CDC), we did the measures including 5 parts: optimal catheter site selection, hand hygiene, Chlorhexidine skin antisepsis, maximal sterile barrier precautions and daily review of line necessity in March 2014. And we made the education classes of nurses and doctors involved in this program. Calculated the CRBSI rates were based on the definition of healthcare associated infection (HAI).
Results: The CRBSI rates of ICU were 1.298 ‰, 1.445‰, of 2011 and 2012, respectively. The mean compliance of executing CVC bundle placement from 2011 to 2013 was 60%, and daily care compliance was 85%. Along with the ongoing CVC bundle program in 2014, we held staff's educations and training, revised procedures and arranged supplies settings. The CRBSI rates subsequently decreased to 0.930‰. CVC bundle placement compliance and daily care compliance raised to 86.1% and 94.6%, respectively from Jan to Oct in 2014.
Conclusions: By implementing the CVC bundle program not only reduced CRBSI rate, but also made us learn much from the process. However, health care workers have inadequate recognition of CVC bundles of only 70.56%. In addition to educating and training new recruits to elevate the recognitions of CVC bundles, hopefully, CVC bundles could be extended into clinical practice in the associated departments of the hospital.

PS 1-130

THE EFFECTIVENESS OF USING BUNDLE CARE TO REDUCE THE INCIDENCE OF CENTRAL LINE-ASSOCIATED BLOOD STREAM INFECTION IN A REGIONAL HOSPITAL

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Purpose: Hospitals are places where we would like to bring patients with medical services, treatments, and overall improvement of health conditions. However, iatrogenic infections caused by various types of invasive techniques or examinations may come along as the most undesirable outcomes.-Both domestic and foreign research documents indicate that there is a correlation between iatrogenic bloodstream infection (BSI) and invasive vascular therapeutic devices. The BIS would result in increases of the cost as well as the duration of hospitalization, or even fatality.Bundle care, based on evidence-based medicine (EBM), has been proven to be the most effective measure in terms of tackling central Line-Associated bloodstream infection (CLBSI). Bundle care is a uniformly structured way applied to the process of patient care that "bundles" several single practices together. It shows positive outcomes on lowering the risk of CLBSI.
Methods: The central line bundle has five key components. There are Hand hygiene, Maximal barrier precautions, Chlorhexidine skin antisepsis, Optimal catheter site selection, with subclavian vein as the preferred site for non-tunneled catheters, and Daily review of line necessity, with prompt removal of unnecessary lines.
In a range of process, we need to meet the advocacy team regularly, take part in the customized education and training, and establish a standardizing process.
In a range of execution, we need to establish a standard technical certification, internal and external audits, technical guidance, creativity and competition advocacy propaganda materials.In a range of result, we plan to reduce the density of the central line associated blood stream infection and the usage of central line.
Results: The density of the central line associated blood stream infection is from 2.2 $^{0}/_{00}$ to 2.4 $^{0}/_{00}$ after bringing to practice in March 2013. The implementation of this project is necessary as we can see in the Table 1.

Table 1 The usage rate of central line in unit ward.

ITEM	2012	2013	May, 2015
ICU	52.6%	42.3%	42.0%
Ward 1	12.8%	16.5%	13.5%
Ward 2	6.8%	5.5%	4.3%
		2013	May, 2015
Ward 3	N/A	11.5%	11.1%
Ward 4	N/A	5.6%	7.4%

Conclusions: The implementation rate of infection of CLBSI is different. But there is the same formula to calculate and to identify with the infection of CLBSI in hospitals. We'll get the best quality of caring results from implementing bundle care components in hospitals.

PS 1-131

IMPLEMENTATION OF THE CATHETER ASSOCIATED URINARY TRACT INFECTION (CAUTI) BUNDLE WITH THE HELP OF INFECTION CONTROL LINK NURSES AND INFECTION CONTROL PRACTICE AUDITORS

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Purpose: Catheter Associated Urinary Tract Infection (CAUTI) is accounts for the highest rate of healthcare associated infection (HAI). To reduce CAUTI and implement the best practice in the hospital, the CAUTI bundle was introduced. The process included training of the Infection Control Link Nurses (ICLN) to educate the front line staff and the infection control practice auditors (ICPA) to monitor the patient-care-practice.
Methods: The ICPA were trained on the CAUTI bundle and the bundle compliance monitor techniques before the baseline data was collected in all wards in May 2014. After that the ICLN were trained on the CAUTI care bundle, they then cascaded the information to their subordinates including nurses and health care assistance by using the same set of training materials. After 3 months of the CAUTI bundle implementation, the survey was repeated to demonstrate the effect.
Results: A survey of 17 wards was done pre and post of the implementation of the CAUTI bundle. Initially the prevalence rate of urinary catheter insertion was 8.9% (40 patients with urinary catheter) at the baseline which decreased to 8% (42 patients with urinary catheter) afterwards. This is much lower than the rate of 12%-25% reported in the literature. Correct indications for catheter insertion improved from 85% to 95%. The compliance with the bundle also improved from 58-98% to 63-100%.
Conclusions: The CAUTI care bundle was implemented successfully with the following results. There was an improvement shown on the correct indications for catheter insertion. The compliance with best practice according to the CAUTI guidelines have improved in most areas. There were two areas for improvement: securing the catheter by proper taping and making sure that the drainage tubing was above the floor. The use of a special catheter anchoring device and periodic audit monitoring could help to sustain the best practice of the CAUTI bundle.